

Application Serial No. 10/717,246
Amendment dated March 10, 2005
Reply to Office Action of December 10, 2005

Auy Dkt No. 7725-0001.10

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces any and all prior versions and listings of claims in the application:

Listing of the Claims

1. (currently amended) A method for preparing a population of water-dispersible nanoparticles, comprising:

(a) admixing (i) an amphipathic dispersant comprised of a polymer having two or more hydrophobic regions and two or more hydrophilic regions, with (ii) a plurality of hydrophobic nanoparticles, in (iii) a nonaqueous solvent, to provide an admixture of dispersant and nanoparticles in solution the solvent;

(b) subjecting the admixture to conditions effective to cause adsorption of the dispersant by the nanoparticles; and

(c) transferring the dispersant-coated nanoparticles prepared in step (b) to an aqueous medium.

2. (original) The method of claim 1, wherein the hydrophilic regions contain ionizable groups.

3. (original) The method of claim 2, wherein prior to step (b), the admixture is treated with an ionizing agent effective to ionize the ionizable groups.

4. (original) The method of claim 3, wherein the ionizable groups are acidic groups and the ionizing agent is a base.

5. (original) The method of claim 4, wherein the base is a nitrogenous base or an inorganic hydroxide.

6. (original) The method of claim 1, wherein step (b) comprises removal of the solvent from the admixture.

7. (original) The method of claim 1, wherein step (c) comprises adding water to the dried admixture.

8. (original) The method of claim 1, wherein the number ratio of the amphipathic dispersant to the plurality of nanoparticles in step (a) is in the range of approximately 50:1 to approximately 5000:1.

9. (original) The method of claim 1, further including crosslinking the amphipathic dispersant adsorbed to the nanoparticles.